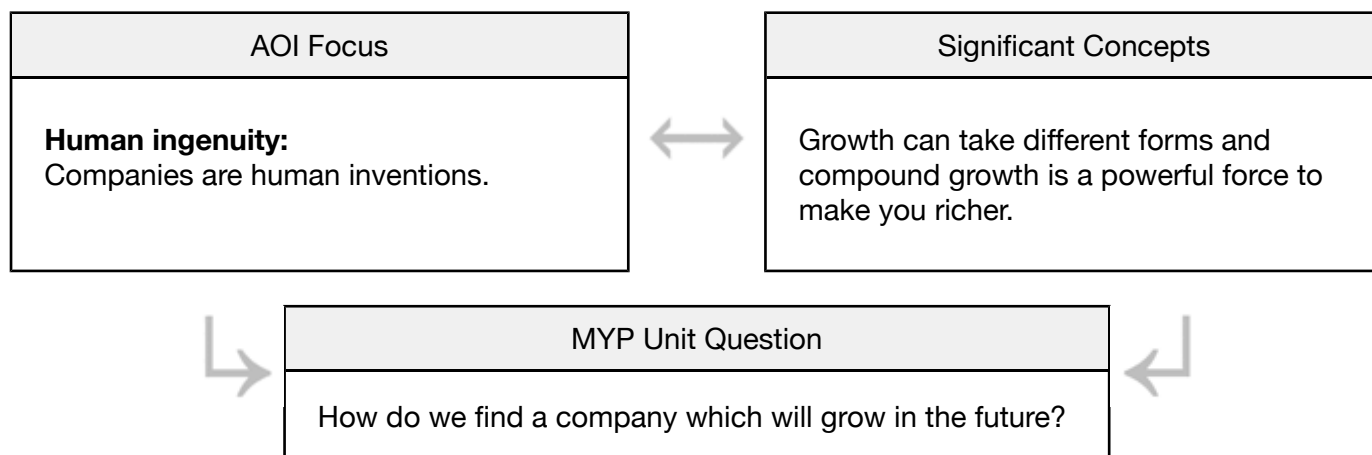


MYP Unit Planner

Unit Title	Company Report
Teacher(s)	Daniel Slosberg
Subject and Grade Level	Standard mathematics Grade 10 — Year 10
Time frame and Duration	10 Weeks

Stage 1: Integrate significant concept, area of interaction and unit question, and ensure it can be assessed



Assessment

<p>What task(s) will allow students the opportunity to respond to the unit question?</p> <p>What will constitute acceptable evidence or understanding? How will students show what they have understood?</p>
<div style="display: flex; align-items: center; gap: 10px;"> <div style="background-color: #f4a460; padding: 2px 5px; border-radius: 3px;">Real-life problem</div> <div style="background-color: #4a7ebb; color: white; padding: 2px 5px; border-radius: 3px;">S</div> <div>The Company Report (A, B, C, D)</div> </div> <p>Students will demonstrate both an arithmetic and a geometric sequence in their final report.</p>

Which specific MYP objectives will be addressed during this unit?
<p>A: Knowledge and understanding</p> <ul style="list-style-type: none"> • use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations, including those in real-life contexts • select and apply general rules correctly to solve problems, including those in real-life contexts. • know and demonstrate understanding of the concepts from the five branches of mathematics (number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics). <p>B: Investigating patterns</p> <ul style="list-style-type: none"> • select and apply appropriate inquiry and mathematical problem-solving techniques. • recognize patterns. • describe patterns as relationships or general rules. • draw conclusions consistent with findings. • justify or prove mathematical relationships and general rules. <p>C: Communication in mathematics</p> <ul style="list-style-type: none"> • use appropriate mathematical language (notation, symbols, terminology) in both oral and written explanations • use different forms of mathematical representation (formulae, diagrams, tables, charts, graphs and models) • communicate a complete and coherent mathematical line of reasoning using different forms of representation when investigating complex problems.

D: Reflection in mathematics

- explain whether their results make sense in the context of the problem.
- explain the importance of their findings.
- justify the degree of accuracy of their results where appropriate.
- suggest improvements to the method when necessary.

Which MYP assessment criteria will be used?**A: Knowledge and understanding****B: Investigating patterns****C: Communication in mathematics****D: Reflection in mathematics**

Interdisciplinary Subjects:

Humanities

- A: Knowing and understanding
- B: Investigating
- C: Thinking critically
- D: Communicating

Stage 2: Backward planning: from the assessment to the learning activities through inquiry

Content

What knowledge and/or skills (from my course overview) are going to be used to enable the student to respond to the guiding question?

What (if any) Standard/skills are to be addressed?

Knowledge & Skills:

- Students will be introduced to arithmetic progressions and lines of best fit; as well as geometric progressions and exponential equations of best fit.

Approaches to Learning

How will this unit contribute to the overall development of subject-specific and general ATL skills?

• Communication:

being informed — including the use of a variety of media

informing others — including presentation skills using a variety of media

• Information literacy:

accessing information — including researching from a variety of sources using a range of technologies, identifying primary and secondary sources

selecting and organizing information — including identifying points of view, bias and weaknesses, using primary and secondary sources, making connections between a variety of resources

referencing — including the use of citing, footnotes and referencing of sources, respecting the concept of intellectual property rights

• Organization:

Time Management

Self Management

• Reflection:

self-evaluation: including the keeping of learning journals and portfolios, reflecting at different stages in the learning process

• Thinking:

Applying knowledge and concepts — including logical progression of arguments

• Transfer:

making connections — including using knowledge, understanding and skills across subjects to create products or solutions, applying skills and knowledge in unfamiliar situations

Students will need to read annual reports of company's and create their own reports.

Learner Profile

Which characteristics of the learner profile will be emphasized? How will you make students aware of them?

- Inquirers: They need to inquire into their company.
- Knowledgeable: They need to learn about companies and how to read annual reports.
- Thinkers: They will need to think about which attribute of the company can be modeled by a linear function and which can be modeled by an exponential function.
- Communicators: They will create a report to communicate their findings.
- Reflective: They will reflect on how accurate their findings are.

International Mindedness

How will international-mindedness be addressed?

Companies from Hong Kong and the United States will be researched.

Learning Experiences

Teaching strategies

How will students know what is expected of them? Will they see examples, rubrics, templates, etc.?	How will we use formative assessments to give students feedback during the unit?
A template without data was created for their final iBook report.	Student friendly rubrics, self-assessment, peer-assessment, and some teacher feedback at certain stages will be used.
How will students acquire the knowledge and practice the skills required? How will they practice applying these?	What different teaching methodologies will be employed?
Students will go through exercises in class to learn how to read the reports.	Group discussion, lecture, and individual classwork will be used.
Do the students have enough prior knowledge?	How are we differentiating teaching and learning for all? Have we considered those learning in the language other than their mother tongue? Have we considered those with special educational needs?
Students have some prior knowledge of sequences, but little prior knowledge of companies, so we need to be aware of this and move slowly in teaching them how to read the annual reports.	Some reports are available in Chinese.

Resources

What resources are available to us?

How will our classroom environment, local environment and/or the community be used to facilitate students' experience during the unit?

Journal:

The library has a collection of annual reports.

Ongoing reflections and evaluations

In keeping an ongoing record, consider the following questions. There are further stimulus questions in the unit planning section of MYP: from principles into practice.

Students And Teachers

- What did we find compelling? Were our disciplinary knowledge/skills challenged in any way?
- What inquiries arose during the learning? What, if any, extension activities arose?
- How did we reflect—both on the unit and on our own learning?
- Which attributes of the learner profile were encouraged through this unit? What opportunities were there for student-initiated action?

This year we did not explicitly connect with humanities. I have put that on as a possible IDU for next year.

Possible Connections

- How successful was the collaboration with other teachers within my subject group and from other subject groups?
- What interdisciplinary understandings were or could be forged through collaboration with other subjects?

IDU with Humanities next year.

Assessment

- Were students able to demonstrate their learning?
- How did the assessment tasks allow students to demonstrate the learning objectives identified for this unit?
- How did I make sure students were invited to achieve at all levels of the criteria descriptors?
- Are we prepared for the next stage?

Data Collection

- How did we decide on the data to collect? Was it useful?